

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

November 9, 2005

IN RE:

**AUDIT OF NASHVILLE GAS COMPANY'S WEATHER
NORMALIZATION ADJUSTMENT FOR THE PERIOD
NOVEMBER 1, 2004 THROUGH MARCH 31, 2005**

**DOCKET NO.
05-00178**

**ORDER ADOPTING WNA AUDIT REPORT OF THE UTILITIES
DIVISION OF THE TENNESSEE REGULATORY AUTHORITY**

This matter came before Director Deborah Taylor Tate, Director Pat Miller and Director Sara Kyle of the Tennessee Regulatory Authority (the "Authority" or "TRA"), the voting panel assigned to this docket, at a regularly scheduled Authority Conference held on October 17, 2005 to consider the audit findings of the Authority's Utilities Division (the "Staff") after review of Nashville Gas Company's ("Nashville Gas" or the "Company") Weather Normalization Adjustment ("WNA") for the period beginning November 1, 2004 and ending March 31, 2005. The WNA Audit Report (the "Report"), attached hereto as Exhibit 1 and incorporated into this order as if fully rewritten herein, reports one finding for the audit period under review. The Report was filed on September 19, 2005.

The Staff finds that Nashville Gas used incorrect Actual Heating Degree Days in the calculation of the WNA for January 9, 2005. The Report states that the result of this error was an over-collection of \$108,007 from the Company's customers. In its response, the Company did not dispute Staff's finding. The Company did offer an explanation that:

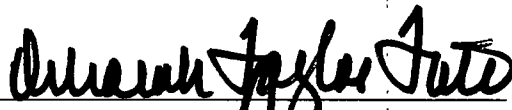
When information was obtained from the NOAA site on January 10, 2005, the site displayed '11' as the number of degree days for January 9, 2005. This is what was entered into Piedmont's billing system.¹

As stated in the Report, the Staff concluded that except for the finding noted, Nashville Gas is materially complying with the WNA Rider and recommended that, since the dollar amount of the finding is immaterial on a per customer basis, the over-recovery should be included in the Company's next Actual Cost Adjustment filing.

At a regularly scheduled Authority Conference held on October 17, 2005, the panel considered the Staff's Report. Thereafter, the voting panel unanimously approved the finding and conclusions contained therein.

IT IS THEREFORE ORDERED THAT:

The Report, a copy of which is attached to this order as Exhibit 1, is approved and adopted, including the finding and recommendation contained therein, and is incorporated into this order as if fully rewritten herein.


Deborah Taylor Tate, Director


Pat Miller, Director


Sara Kyle, Director

¹ Notice of Filing by Utilities Division of the Tennessee Regulatory Authority, Exhibit A, p 5 (September 19, 2005)

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BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

September 19, 2005

IN RE:

NASHVILLE GAS COMPANY, a Division of

PIEDMONT NATURAL GAS COMPANY

WEATHER NORMALIZATION ADJ. (WNA) AUDIT)

Docket No. 05-00178

**NOTICE OF FILING BY UTILITIES DIVISION OF THE TENNESSEE
REGULATORY AUTHORITY**

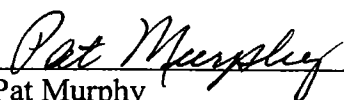
Pursuant to Tenn. Code Ann. §§65-4-104, 65-4-111 and 65-3-108, the Utilities Division of the Tennessee Regulatory Authority (the "Utilities Division") hereby gives notice of its filing of the Nashville Gas Company WNA Audit Report in this docket and would respectfully state as follows:

1. The present docket was opened by the Authority to hear matters arising out of the audit of Nashville Gas Company (the "Company").
2. The Company's WNA filings were received on November 1, 2004, through March 31, 2005, and the Staff completed its audit of same on August 31, 2005.
3. On September 2, 2005, the Utilities Division issued its preliminary WNA findings to the Company, and on September 14, 2005, the Company responded thereto.
4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report ("The Report") resulted therefrom. The Report is

attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report contains the audit findings of the Utilities Division, the Company's responses thereto and the recommendations of the Utilities Division in connection therewith.

5. The Utilities Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the same.

Respectfully Submitted:



Pat Murphy
Utilities Division of the
Tennessee Regulatory Authority

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of September 2005, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Ron Jones
Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

David R. Carpenter
Manager – Regulatory Projects
Piedmont Natural Gas Company
P.O. Box 33068
Charlotte, North Carolina 28233


Pat Murphy

COMPLIANCE AUDIT REPORT

OF

NASHVILLE GAS COMPANY

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

DOCKET NO. 05-00178

PREPARED BY

TENNESSEE REGULATORY AUTHORITY

UTILITIES DIVISION

SEPTEMBER 2005

EXHIBIT A

COMPLIANCE AUDIT
NASHVILLE GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
Docket No. 05-00178

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COMPLIANCE AUDIT
NASHVILLE GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

I. INTRODUCTION AND AUDIT OPINION

The subject of this compliance audit is the Weather Normalization Adjustment (WNA) Rider of Nashville Gas Company (hereafter "NGC" or the "Company"), a division of Piedmont Natural Gas Company. The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers' bills appropriately between November 1, 2004 and March 31, 2005. As a result of the WNA Rider, the Company surcharged a net \$2,919,498 and \$1,573,384 to the residential and commercial customers respectively during the period. The impact of WNA revenues on the Company's total revenues is detailed in Section V.

The Audit Staff's audit results produced one finding for the audit period under review. Except for the finding reported in Section VI, Staff concludes that the Company is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Regulatory Authority ("TRA" or the "Authority") and included in the Company's tariff. (See Attachment 1)

II. SCOPE OF AUDIT

In meeting the objective of the audit, the Audit Staff compared the following on a daily basis: 1) the Company's actual heating degree days to National Oceanic and Atmospheric Administration (NOAA) actual heating degree days; 2) the Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and 3) the Company's calculation of the WNA factor to Staff's calculation. In addition, the Audit Staff audited a sample of customers' bills during the WNA period to verify that the WNA factor had been correctly applied to the customer bills. The Audit Staff also examined each sample bill to determine if the correct Base Rates and Purchased Gas Adjustments were billed. No discrepancies were discovered; therefore, the Audit Staff concludes that Nashville is correctly billing its customers.

Pat Murphy and Paul Greene of the Utilities Division conducted this audit.

III. BACKGROUND INFORMATION ON NASHVILLE GAS COMPANY

Nashville Gas Company, with headquarters at 665 Mainstream Drive, Nashville, Tennessee, is an operating division of Piedmont Natural Gas Company, which has its headquarters at 1915 Rexford Road, Charlotte, North Carolina. NGC is a gas distributor that provides service to several communities in the Middle Tennessee area. The natural gas used to serve these areas is purchased from producers and marketers and transported to Nashville's city gate through the interstate transmission facilities of Tennessee Gas Pipeline (TGP), Columbia Gas Transmission Corporation (CGTC), and Texas Eastern Gas Pipeline (TETCO).

IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

In its September 26, 1991 Order in Docket 91-01712, the Tennessee Regulatory Authority, formerly the Tennessee Public Service Commission, approved a three year experimental Weather Normalization Adjustment (WNA) Rider to be applied to residential and commercial customers' bills during the months of October through May of each year (See Attachment 1). In its June 21, 1994 order, the TRA adopted the WNA Rider as a permanent rule, to be applied November through March of each year for Nashville Gas Company.

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.

However, normal weather rarely occurs. This has two impacts:

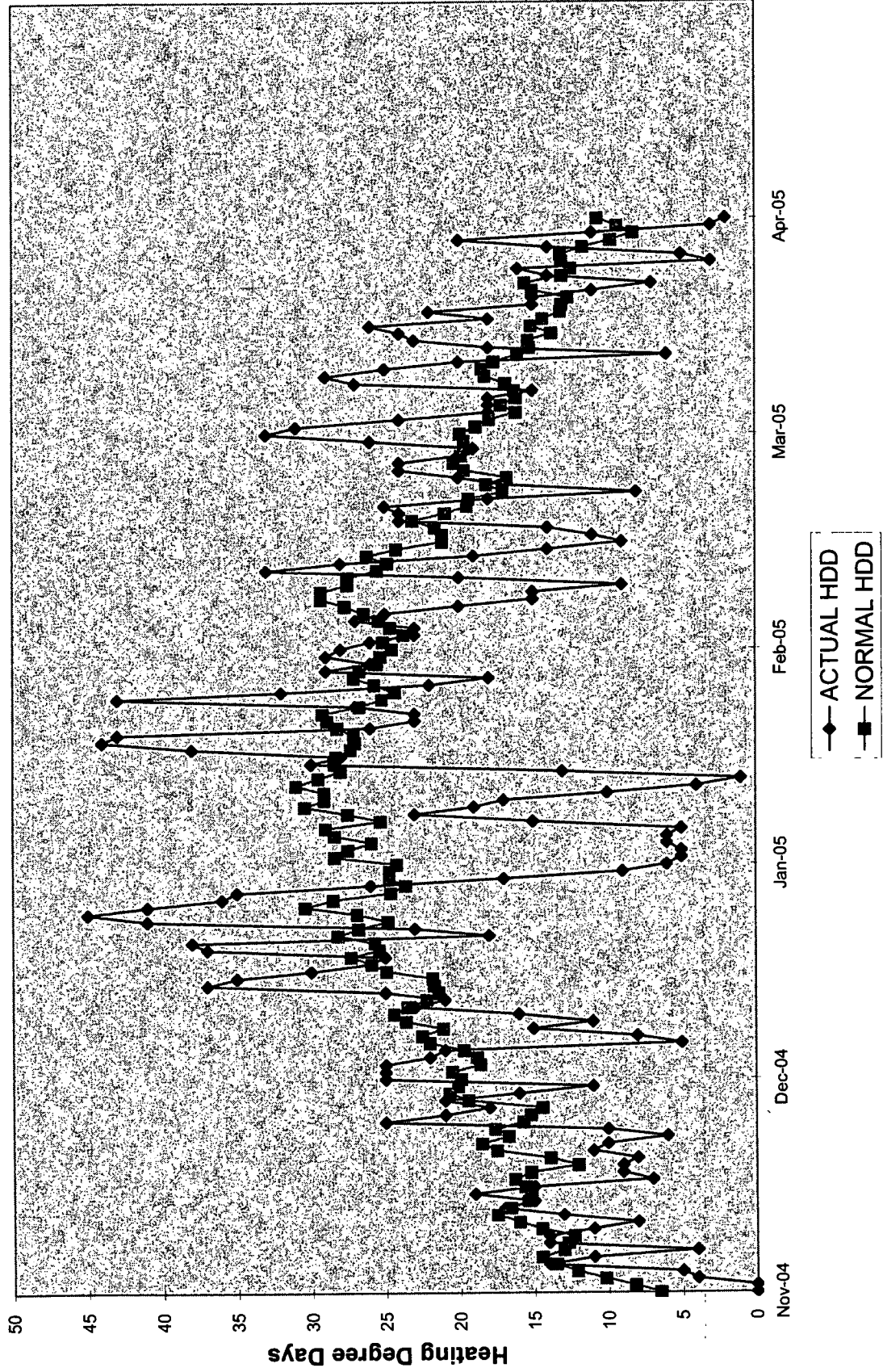
- 1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and
- 2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

In recognition of this fact, the TRA approved a WNA mechanism to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit (refund) on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.

The graph (found at the end of this section) compares the actual heating degree days to normal heating degree days for Nashville Gas during the 2004 - 2005 heating season. It shows that in all months, except December 2004 and March 2005, the weather (overall) was warmer than normal, resulting in a net surcharge from Nashville Gas to its customers for the period. The table below quantifies the number of actual heating degree days by month as compared to the normal heating degree days for that month. Overall the weather was 12 percent (12%) warmer than normal.

| Month | Actual Heating Degree Days | Normal Heating Degree Days | Warmer/Colder than Normal |
|---------------|-------------------------------|-------------------------------|------------------------------|
| October 2004 | 63 | 187.6 | Warmer |
| November 2004 | 346 | 447.0 | Warmer |
| December 2004 | 767 | 738.3 | Colder |
| January 2005 | 664 | 849.6 | Warmer |
| February 2005 | 554 | 639.3 | Warmer |
| March 2005 | 531 | 452.8 | Colder |
| Total | 2,925 | 3,314.6 | Warmer |

Nashville Gas Company
Comparison of Actual to Normal Heating Degree Days
Nashville Weather Station



V. IMPACT OF WNA RIDER

Since the overall weather during the November 1, 2004 through March 31, 2005 period was warmer than normal, the net impact of the WNA Rider was that residential and commercial customers were **surcharged** \$2,919,498 and \$1,573,384 respectively. This equates to increases in revenues from residential and commercial sales of 3.00% and 2.56% respectively. (See Table 1) This is an increase from the previous year when the residential and commercial customers were **surcharged** \$1,135,064 and \$636,702 respectively (See Table 2).

Table 1

Impact of WNA Rider on Residential & Commercial Revenues November 1, 2004 - March 31, 2005

| | <u>WNA Rider Revenues</u> | <u>Total Revenues</u> | <u>Percentage Impact of WNA Rider On Revenue</u> |
|-------------------|-------------------------------|---------------------------|--|
| Residential Sales | \$ 2,919,498 | \$ 97,473,116 | 3.00% |
| Commercial Sales | <u>1,573,384</u> | <u>61,520,111</u> | 2.56% |
| Total | <u>\$ 4,492,882</u> | <u>\$158,993,227</u> | 2.83% |

Table 2

Amount Surcharged (Refunded) 2001 - 2005

| | <u>Residential</u> | <u>Commercial</u> | <u>Total Surcharge/Refund</u> |
|------------|---------------------|-------------------|-----------------------------------|
| 11/02-3/03 | -2,415,614 | -1,399,730 | -3,815,344 |
| 11/03-3/04 | 1,135,064 | 636,702 | 1,771,766 |
| 11/03-3/04 | <u>2,919,498</u> | <u>1,573,384</u> | <u>4,492,882</u> |
| Total | <u>\$ 1,638,948</u> | <u>\$ 810,356</u> | <u>\$ 2,449,304</u> |

VI. WNA FINDINGS AND CONCLUSIONS

As noted in Section I of this report, Staff had one finding for the audit of the period November 2004 through March 2005. The finding identified that the Company used incorrect actual degree days for one day in their calculations which resulted in a over-recovery from the Company's customers.

The finding is considered immaterial when compared with the total WNA revenue and Staff believes that the Company is materially complying with the WNA Rider.

FINDING #1:

Exception:

The Company used incorrect actual degree days on January 9, 2005 in its weather normalization calculation.

Discussion:

The Company understated the actual degree days used in its WNA calculation by six (6) on January 9, 2005. The Company used eleven (11) degree days on January 9, 2005 while the degree days published by NOAA were 17. This degree day difference affected twenty-two (22) billing cycles and resulted in a net **over-recovery of \$108,007** in WNA revenues.

Since the dollar amount of this finding is immaterial on a per customer basis, Staff recommends including the over-recovery in the Company's next Actual Cost Adjustment filing.

Company Response:

When information was obtained from the NOAA site on January 10, 2005, the site displayed '11' as the number of degree days for January 9, 2005. This is what was entered into Piedmont's billing system. Please see attached file for the information used to input the degree days for January 9th.¹

Staff Response:

While the Company must obtain actual degree day information from a weather information source on a real time basis, the WNA Rider and the Audit Staff's audit of this Rider is based on the official NOAA publication. The Audit Staff understands that discrepancies can occur from the Company's source through no fault of the Company.

¹ See Attachment 2

SERVICE SCHEDULE NO. 315

Weather Normalization Adjustment

(WNA) Rider

I. Provision for Adjustment

The base rates per therm (100,000 Btu) for gas service set forth in any rate schedules utilized by the Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment".

The Weather Normalization Adjustment will be applicable for bills rendered on and after November 1 and continuing through the final billing cycle in March of each year.

II. Definitions

For the purposes of this Rider:

"Authority" means the Tennessee Regulatory Authority.

"Relevant Rate Order" means the final order of the Authority in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Authority specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

III. Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per therm by the following formula:

$$WNA_i = R_i \quad * \quad \frac{(HSF_i(NDD-ADD))}{(BL_i + (HSF_i \times ADD))}$$

Where:

I = any particular rate schedule or billing classification within any particular rate schedule that contains more than one billing classification.

WNA_i = Weather Normalization Adjustment Factor for the i^{th} rate schedule or classification expressed in cents per therm.

R_i = weighted average base rate (base rate less any embedded gas cost) of temperature sensitive sales for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.

- HSF_1 = heat sensitive factor for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.
- NDD = normal billing cycle heating degree days utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.
- ADD = actual billing cycle heating degree days.
- BL_1 = base load sales for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.

IV. Filing with Authority

The Company will file as directed by the Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

Preliminary Local Climatological Data for Nashville, Tennessee, January, 2005

page 1 of 1

| NWS Form F-6, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, *Non-Certified Preliminary Local Climatological Data for Nashville, Tennessee, January, 2005 Latitude: 36.06 N, Longitude: 86.42 W, Ground Elevation: 571 ft, Standard Time: Central | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|------|-----------------------|-------------|---------|---------------|-----------------------|-------------------------------------|---------------|--------------------|-----------|-----------------|-----------|-------------|---------------------|----------------------|--|
| Day | Temperature | | | Departure from Normal | Degree Days | | Precipitation | | Snow, Ice Pellets, or Ice on Ground | Wind (m p h.) | | | | | Sunshine | | Weather Occurrences* | |
| | Maximum | Minimum | Mean | | Heating | Cooling | Total | Snowfall, Ice Pellets | | Average Speed | Fastest Mile Speed | Direction | Peak Wind Speed | Direction | Total (Min) | Percent of Possible | | |
| 1 | 69 | 50 | 60 | 23 | 5 | 0 | T | 0.0 | 0 | 5.5 | 13 | 240 | 16 | 240 | 503 | 86 | - | |
| 2 | 65 | 55 | 50 | 23 | 5 | 0 | 0.36 | 0.0 | 0 | 6.9 | 14 | 210 | 20 | 200 | 170 | 29 | BR | |
| 3 | 64 | 53 | 59 | 22 | 6 | 0 | T | 0.0 | 0 | 7.9 | 15 | 210 | M | M | 156 | 27 | - | |
| 4 | 63 | 54 | 59 | 22 | 6 | 0 | T | 0.0 | 0 | 7.1 | 14 | 210 | 18 | 220 | 0 | 0 | BR | |
| 5 | 64 | 56 | 60 | 23 | 5 | 0 | 0.02 | 0.0 | 0 | 11.6 | 23 | 170 | 29 | 200 | 60 | 10 | BR | |
| 6 | 64 | 36 | 50 | 13 | 15 | 0 | 0.36 | 0.0 | 0 | 9.1 | 22 | 300 | 30 | 300 | 0 | 0 | BR | |
| 7 | 49 | 35 | 42 | 5 | 23 | 0 | 1.71 | 0.0 | 0 | 4.7 | 13 | 300 | 17 | 110 | 0 | 0 | BR | |
| 8 | 51 | 40 | 46 | 9 | 19 | 0 | 0.00 | 0.0 | 0 | 6.5 | 18 | 290 | 24 | 280 | 0 | 0 | BR | |
| 9 | 57 | 39 | 48 | 11 | 11 | 0 | 0.00 | 0.0 | 0 | 6.6 | 14 | 200 | 16 | 200 | 226 | 38 | - | |
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| SUM | | | | | | | | | | | | | | | | | | |
| AVG | | | | | | | | | | | | | | | | | | |

* BR=Fog, FG=Heavy Fog, HZ=Haze, TS=Thunderstorm